Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Homework:**

*Mole-Particle and Mole-Mass Conversions with Elements*

**Directions: Complete the following mole conversions using your Unit 7 notes packet. Show your work when necessary!**

1. What is the mass of one mole of neon? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the mass of one mole of calcium? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the mass of one mole of silver? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the mass of 4 moles of lithium? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the mass of 7 moles of strontium? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is the mass of one mole of arsenic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. How many atoms are in one mole of arsenic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. How many moles are contained in 2.005 x 1023 atoms of arsenic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. How many moles are in 200.5 grams of arsenic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Calculate the number of atoms in each of the following quantities.**

1. 3.00 mole Zr
2. 3.27 mole Zn
3. 0.000300 mole Au
4. 1.55 mole Kr

**Calculate the moles present in:**

1. 2.00 grams of Ca
2. 75.57 grams of Fe
3. 100. grams of K
4. 8.76 grams of Na
5. 26.0 gram Ca
6. 5.08 gram Xe

**Calculate the mass in grams of each of the following quantities.**

1. 0.100 moles of K
2. 1.500 moles of Cr
3. 0.750 moles of Na
4. 3.40 x 10¯5 moles of C
5. 2.55 mole Cu
6. 1.95 mole Ba